

**Environmental
Resources
Management**

75 Valley Stream Parkway
Suite 200
Malvern, PA 19355
484-913-0300
484-913-0301 (Fax)
www.erm.com



30 December 2015
Reference: 0042525

VIA ELECTRONIC MAIL

Mr. Will Geiger
Remedial Project Manager
U.S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

RE: North Penn Area 2 Superfund Site/Former AMETEK Facility
Progress Report for 2015

Dear Mr. Geiger:

On behalf of AMETEK, Inc. (AMETEK) and Penn Color, Inc. (Settling Defendants), Environmental Resources Management, Inc. (ERM) hereby submits this progress report pursuant to Section X of the Consent Decree (Consent Decree) executed between the Settling Defendants and the United States of America and entered on 10 February 2011.

SUMMARY OF ACTIVITIES PERFORMED IN REFERENCED PERIOD

1. Recovery wells PW-3 and MW-2 were operated to recover volatile organic compound (VOC)-impacted groundwater. See the Summary of Data section below.
2. The Settling Defendants continued Wetland and Surface Soil operation and maintenance (O&M) activities, including the following.
 - a. ERM inspected the wetland and surface soil area restorations (plantings and seeded areas).
3. The Settling Defendants continued Groundwater O&M activities, including the following.
 - a. ERM replaced the PW-3 pump motor and riser pipe on 10 March 2015.
 - b. ERM performed maintenance on the galvanized conveyance piping on 20 March 2015.
 - c. ERM replaced the MW-2 cycle counter on 7 April 2015.
 - d. ERM performed annual groundwater sampling of Groups 1 and 2 wells (23 wells) in May 2015.

- e. ERM performed surface water sampling (4 locations) on 18 May 2015.
- f. ERM collected site-wide well water level measurements (40 wells) on 18 May 2015.
- g. ERM performed semiannual groundwater sampling of Group 1 wells (7 wells) in 13 November 2015.
- h. ERM performed surface water sampling (4 locations) on 13 November 2015.
- i. ERM collected site-wide well water level measurements (40 wells) on 13 November 2015.
- j. ERM performed the sewer manhole inspection for annual flow verification on 22 December 2015.
- k. ERM performed the annual institutional controls monitoring on 22 December 2015.

SUMMARY OF DATA RECEIVED OR GENERATED IN REFERENCED PERIOD

1. Tables 1A1 and 1A2 contain the groundwater sample analytical data for the two events described above. The Group 1 wells, other than the recovery wells, continue to be below the remediation goals, which indicates the groundwater capture system continues to be effective.
2. Tables 1B1 and 1B2 contain the surface water sample analytical data for the two events described above. During the May event (see Table 1B1), one surface water sample had Cadmium and Manganese exceedances and one surface water sample had a Cadmium exceedance. However, during the November event (see Table 1B2), all the surface water sample results were below the remediation goals (Surface Water Criteria) consistent with the results during the first two years of monitoring, which indicates the wetlands remediation work has been effective.
3. Tables 2 through 4 summarize the recent performance data for recovery wells PW-3 and MW-2. The most recent estimate of the amount of VOCs remaining in the bedrock groundwater is depicted graphically on Figure A.
4. Table 5 contains the groundwater level and surface water level monitoring data described above.
5. Pumping rate and static water level monitoring data were evaluated to assure maintenance of hydraulic control over the contaminant

plume. Figures 1 through 3 are potentiometric surface maps for respectively the shallow, intermediate, and deep wells and are based on the May 2015 water level monitoring. Figures 4 through 6 are similar maps based on the November 2015 water level monitoring. The figures indicate groundwater drawdown and capture is apparent.

SUMMARY OF DELIVERABLES SUBMITTED IN REFERENCED PERIOD

1. The progress report for 2014 Quarter 4 was submitted on 20 February 2015.

ANTICIPATED ACTIVITIES FOR THE NEXT QUARTER

1. The Settling Defendants will continue Wetland and Surface Soil RA activities, including the following.
 - a. The wetland and surface soil area restorations (plantings and seeded areas) may be monitored.
2. The Settling Defendants will continue Groundwater RA activities, including the following.
 - a. PW-3 pump maintenance and/or replacement will be performed as necessary.
 - b. PW-3 and MW-2 operations and pumping rates will be monitored.

SCHEDULE PERCENT COMPLETION AND DELAYS

1. Not applicable at this time.

MODIFICATIONS TO PLANS OR SCHEDULES

1. Progress reports will be submitted semiannually, to coincide with reporting on the semiannual groundwater and stream monitoring.
2. There are no other modifications to the work plans or other schedules at this time.

COMMUNITY RELATIONS

1. Not applicable at this time.

Please review this information and, if you have any questions, please call me at 484-913-0360 or Rich Dulcey at 609-403-7509.

Sincerely,

A handwritten signature in black ink that reads "JACOB D. FERRY". The letters are written in a cursive, slightly slanted style.

Jake Ferry, P.E.
Project Manager

Enclosures: Tables 1A1 through 5
 Figures A and 1 through 6

cc: D. Armstrong, PADEP
 T. Deeney, AMETEK
 M. Berg, Madelaine R. Berg, Esq. LLC
 W. Ponticello, Penn E&R
 R. Dulcey, ERM

Table 1A1
 Groundwater Sampling Results - May 2015
 North Penn Area 2 Superfund Site
 Hatfield Township, Pennsylvania

Analyte	Cleanup Standard* (µg/L)	MW-2 789328 5/18/2015 Groundwater µg/L			MW-2I 7902340 5/22/2015 Groundwater µg/L			MW-2D 7902341 5/22/2015 Groundwater µg/L			MW-3A 7898504 5/20/2015 Groundwater µg/L			MW-3B 7898505 5/20/2015 Groundwater µg/L			MW-3C 7898506 5/20/2015 Groundwater µg/L			MW-3D 7898507 5/20/2015 Groundwater µg/L			MW-3DMS 7898508 5/20/2015 Groundwater µg/L			MW-3DMSD 7898509 5/20/2015 Groundwater µg/L			MW-3DDUP 7898510 5/20/2015 Groundwater µg/L		
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
Volatiles Organic Compounds																															
Carbon Tetrachloride	5	ND		5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NS		NS		NS		NS		NS
1,2-Dichloroethane	5	ND		5	0.5	J	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	NS		NS		NS		NS		NS
1,1-Dichloroethene	7	1,900		5	310		5	7		0.5	13		0.5	42		0.5	38		0.5	140		0.5	NS		NS		NS		NS		NS
cis-1,2-Dichloroethene	70	71		5	39		0.5	N.D.	0.5	N.D.	22		0.5	12		0.5	77		0.5	4		0.5	NS		NS		NS		NS		NS
Tetrachloroethene	5	120		5	2		0.5	0.9	J	0.5	240		0.5	6		0.5	ND		0.5	4		0.5	NS		NS		NS		NS		NS
Trichloroethene	5	6,700		50	910		5	17		0.5	270		0.5	270		0.5	15		0.5	370		E	NS		NS		NS		NS		NS
Vinyl Chloride	2	ND		5	1		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	0.5		J	NS		NS		NS		NS		NS
Semi-volatile Organic Compounds																															
1,4-Dioxane	6.1	290		10	44		1	ND		1	15		1	7		1	9		1	25		1	NS		NS		NS		NS		NS
Dissolved Metals																															
Antimony	6	N.D.		0.33	ND		0.33	ND	0.33	ND	0.33	ND	0.33	ND	0.33	ND	0.33	ND	0.33	ND	0.33	ND	6.8		0.33	6.4		0.33	ND	0.33	ND
Arsenic	10	1.3	J	0.82	8.3		0.82	10.4		0.82	1.2	J	0.82	2.1		0.82	3.1		0.82	11.6		0.82	21.7		0.82	22.8		0.82	10.4		0.82
Manganese	217	4.7		0.55	39.2		0.55	44.1		0.55	13.3		0.55	0.76	J	0.55	153		0.55	40.8		0.55	96.1		0.55	95.2		0.55	39.3		0.55
Thallium	0.5	N.D.		0.15	ND		0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	2.1		0.15	2.1		0.15	ND	0.15	ND

Analyte	Cleanup Standard* (µg/L)	MW-5S 7896148 5/19/2015 Groundwater µg/L			MW-5I 7896145 5/19/2015 Groundwater µg/L			MW-5D 7900168 5/21/2015 Groundwater µg/L			MW-5XD 7896151 5/19/2015 Groundwater µg/L			MW-6S 7900166 5/21/2015 Groundwater µg/L			MW-7S 7900167 5/21/2015 Groundwater µg/L			MW-9I 7896147 5/19/2015 Groundwater µg/L			PCGW-2 7893327 5/18/2015 Groundwater µg/L			DUP-052015 7898511 5/20/2015 Groundwater µg/L			EB-52015 7898512 5/20/2015 Equipment Blank µg/L					
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL			
Volatiles Organic Compounds																																		
Carbon Tetrachloride	5	ND		0.5	ND		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5			
1,2-Dichloroethane	5	ND		0.5	ND		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5			
1,1-Dichloroethene	7	ND		0.5	28		0.5	44		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	130		0.5			
cis-1,2-Dichloroethene	70	12		0.5	2		0.5	3		0.5	ND	0.5	ND	0.5	1		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	5		0.5				
Tetrachloroethene	5	6		0.5	4		0.5	3		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	4		0.5	ND	0.5	ND		
Trichloroethene	5	22		0.5	66		0.5	140		0.5	ND	0.5	ND	0.5	18		0.5	2		0.5	ND	0.5	ND	0.5	ND	0.5	260		0.5	5	ND	0.5		
Vinyl Chloride	2	ND		0.5	ND		0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	0.50	ND	0.5	0.6	J	0.5	ND	0.5	ND
Semi-volatile Organic Compounds																																		
1,4-Dioxane	6.1	ND		1	5	J	1	9		1	ND	1	ND	2	J	1	ND	1	ND	1	ND	1	ND	1	ND	26		1	ND	1	ND			
Dissolved Metals																																		
Antimony	6	0.66	J	0.34	ND		0.34	ND	0.33	ND	0.33	ND	0.33	0.49	J	0.33	ND	0.33	ND	ND	0.33	ND	ND	0.33	ND	ND	0.33	ND	ND	0.33	ND			
Arsenic	10	25.3		0.82	9		0.82	15.9		0.82	25.8		0.82	2.5		0.82	0.87	J	0.82	3.5		0.82	4.7		0.82	11.2		0.82	ND	0.82	ND			
Manganese	217	1,980		2.7	129		0.55	20.6		0.55	26.6		0.55	306		0.55	ND	0.55	ND	1.3	J	0.55	73.7		0.55	39.3		0.55	ND	0.55	ND			
Thallium	0.5	ND		0.15	ND		0.15	ND	0.15	ND	0.15	ND	0.15	N.D.		0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND	0.15	ND			

Notes:
 * Cleanup Standard as listed in Record of Decision.
 ** Dup-053014 was collected at MW-11A; DUP-060314 was collected at MW-5I
 MDL: Medium Detection Limit
 Q: Lab Qualifier
 J: Indicates an estimated value between the MDL and the Practical Quantitation Limit (PQL) for the analyte.
 E: Result estimated because it exceeded the calibration range of the instrument
Bolded values indicate results greater than MDL.
Highlighted values indicate results exceed the cleanup standard.
 ND: Not Detected
 NS: Not Sampled

Table 1A1
Groundwater Sampling Results - May 2015
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania

Analyte	Cleanup Standard* (µg/L)	MW-11A 7896152 5/19/2015 Groundwater µg/L			DUP-051915** 7896153 5/19/2015 Groundwater µg/L			MW-11B 7896149 5/19/2015 Groundwater µg/L			MW-11C 7896150 5/19/2015 Groundwater µg/L			MW-13S 7893324 5/18/2015 Groundwater µg/L			MW-13I 7893325 5/18/2015 Groundwater µg/L			MW-13D 7893326 5/18/2015 Groundwater µg/L			MW-14I 7896146 5/19/2015 Groundwater µg/L			PW-3 7893329 5/18/2015 Groundwater µg/L					
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL			
<i>Volatile Organic Compounds</i>																															
Carbon Tetrachloride	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,1-Dichloroethene	7	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
cis-1,2-Dichloroethene	70	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Tetrachloroethene	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Trichloroethene	5	ND		0.5	ND		0.5	0.8	J	0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Vinyl Chloride	2	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
<i>Semivolatile Organic Compounds</i>																															
1,4-Dioxane	6.1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1	ND		1
<i>Dissolved Metals</i>																															
Antimony	6	ND		0.33	ND		0.33	ND		0.34	ND		0.34	ND		0.33	ND		0.33	ND		0.33	ND		0.33	ND		0.33	ND		0.33
Arsenic	10	1	J	0.82	1.2	J	0.82	1.2	J	0.78				3.4		0.82	8.7		18.1		0.82	4.1		0.82	3.9		0.82	3.9		0.8	
Manganese	217	0.72	J	0.55	2.4	J	0.55	5.4		0.73			8.1		0.55	42		0.55	17.7		0.55	4.1		0.55	41.7		0.55	41.7		0.55	
Thallium	0.5	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15	ND		0.15

Analyte	Cleanup Standard* (µg/L)	EB-052115 7900169 5/21/2015 Equipment Blank µg/L			TB-051815 7893323 5/18/2015 Trip Blank µg/L			TB-051915 7896144 5/19/2015 Trip Blank µg/L			TB-052015 7898503 5/20/2015 Trip Blank µg/L			TB-052115 7900165 5/21/2015 Trip Blank µg/L			TB-052215 7902339 5/22/2015 Trip Blank µg/L		
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
<i>Volatile Organic Compounds</i>																			
Carbon Tetrachloride	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,1-Dichloroethene	7	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
cis-1,2-Dichloroethene	70	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Tetrachloroethene	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Trichloroethene	5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Vinyl Chloride	2	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
<i>Semivolatile Organic Compounds</i>																			
1,4-Dioxane	6.1	ND		1	NS		NS	NS		NS		NS	NS		NS		NS		NS
<i>Dissolved Metals</i>																			
Antimony	6	ND		0.33	NS		NS	NS		NS		NS	NS		NS		NS		NS
Arsenic	10	ND		0.82	NS		NS	NS		NS		NS	NS		NS		NS		NS
Manganese	217	ND		0.55	NS		NS	NS		NS		NS	NS		NS		NS		NS
Thallium	0.5	ND		0.15	NS		NS	NS		NS		NS	NS		NS		NS		NS

Notes:
 * Cleanup Standard as listed in Record of Decision.
 ** Dup-053014 was collected at MW-11A; DUP-060314
 MDL: Medium Detection Limit
 Q: Lab Qualifier
 J: Indicates an estimated value between the MDL and t
 E: Result estimated because it exceeded the calibration
Bolded values indicate results greater than MDL.
 ND: Not Detected
 NS: Not Sampled

Table 1A2
Groundwater Sampling Results - November 2015
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania

Analyte	Cleanup Standard* (µg/L)	PW-3 8134437 11/13/2015 Groundwater µg/L			MW-2 8134436 11/13/2015 Groundwater µg/L			MW-9I 8134432 11/13/2015 Groundwater µg/L			MW-14I 8134431 11/13/2015 Groundwater µg/L			MW-13D 8134433 11/13/2015 Groundwater µg/L			MW-13I 8134435 11/13/2015 Groundwater µg/L			MW-13S 8134434 11/13/2015 Groundwater µg/L			TB20151113 8134438 11/13/2015 Groundwater µg/L					
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL			
<i>Volatile Organic Compounds</i>																												
Carbon Tetrachloride	5	ND		0.5	ND		3	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	5	ND		0.5	ND		3	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,1- Dichloroethene	7	160		0.5	1,600		25	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
cis-1,2-Dichloroethene	70	9		0.5	48		3	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Tetrachloroethene	5	59		0.5	79		3	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Trichloroethene	5	420		5	4,700		25	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Vinyl Chloride	2	ND		0.5	ND		3	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5

Notes:

*Cleanup Standard as listed in Record of Decision

MDL: Medium Detection Limit

Q: Lab Qualifier

All units in microgram per liter (µg/L)

J: Indicates an estimated value between the MDL and the Practical Quantitation Limit (PQL) for the analyte.

Bolded values indicate results greater than MDL.

Highlighted values indicate results exceed the cleanup standard.

ND: Not Detected

Table 1B1
Surface Water Sampling Results - May 2015
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania

Analyte	Criteria* (µg/L)	SMP-0			SMP-1			SMP-2			SMP-3		
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
<i>Volatile Organic Compounds</i>													
Carbon Tetrachloride	0.23	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,2-Dichloroethane	0.38	ND		0.5	ND		0.5	ND		0.5	ND		0.5
1,1-Dichloroethene	33	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Tetrachloroethene	0.69	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Trichloroethene	2.5	ND		0.5	ND		0.5	ND		0.5	ND		0.5
Vinyl Chloride	0.025	ND		0.5	ND		0.5	ND		0.5	ND		0.5
<i>Metals</i>													
Chromium	5.6	1.3	J	1.3	ND		1.3	ND		0.34	ND		0.34
Trivalent Chromium waters	10	ND		7.0	ND		7.0	ND		0.78	ND		0.8
Cadmium	0.32	ND		0.17	ND		0.17	0.60		0.00023	0.23	J	0.00023
Antimony	NA	0.37	J	0.33	ND		0.33	ND		0.0016	ND		0.0016
Arsenic	NA	ND		0.82	ND		0.82	ND		0.006	ND		0.006
Manganese	101	59.8		0.55	45.4		0.55	154		0.006	222		0.0016
Thallium	3.79	ND		0.15	ND		0.15	ND		0.000085	ND		0.000085
Hexavalent Chromium	0.24	ND		7.0	ND		7.0	ND		0.015	ND		0.015
Zinc, Total	163	NA			NA			NA			NA		

Notes:

* Criteria are the lower value of the Fish and Aquatic Life Continuous Criteria and the Human Health Criteria. See Table 1 in Remedial Action Sampling and Analy:

** Chromium III = Total Chromium - Hexavalent Chromium. Calculation performed by the laboratory.

MDL: Medium Detection Limit

Q: Lab Qualifier

J: Indicates an estimated value between the MDL and the Practical Quantitation Limit (PQL) for the analyte.

Bold values indicate results greater than MDL.

Highlighted values indicate results exceed the cleanup standard.

ND: Not Detected

NS: Not Sampled

NA: Not Analyzed (due to laboratory issue)

Table 1B2
Surface Water Sampling Results - November 2015
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania

Analyte	Surface Water Criteria* (µg/L)	SMP-0			SMP-1			SMP-2			SMP-3			TB20151113		
		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
<i>Volatile Organic Compounds</i>																
Carbon Tetrachloride	0.23	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.5
1,2-Dichloroethane	0.38	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.5
1,1-Dichloroethene	33	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.5
Tetrachloroethene	0.69	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.5
Trichloroethene	2.5	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.5
Vinyl Chloride	0.025	ND		0.1	ND		0.1	ND		0.1	ND		0.1	ND		0.50
<i>Metals</i>																
Chromium	5.6	ND		1.5	ND		1.5	ND		1.5	ND		1.5			NS
Trivalent Chromium waters	101	ND		7	ND		7	ND		7	ND		7			NS
Zinc, Total	163	5.8	J	3.9	ND		3.9	ND		3.9	5	J	3.9			NS
Cadmium	0.32	ND		0.23	ND		0.23	ND		0.23	ND		0.23			NS
Lead	3.79	ND		0.13	0.26	J	0.13	ND		0.13	ND		0.13			NS
Antimony	5.6	ND		0.33	ND		0.33	0.38	J	0.33	ND		0.33			NS
Arsenic	10	ND		0.54	ND		0.54	ND		0.54	ND		0.54			NS
Thallium	0.24	ND		0.15	ND		0.15	ND		0.15	ND		0.15			NS
Hexavalent Chromium	101	ND		7	ND		7	ND		7	ND		7			NS

Notes:

* Criteria are the lower value of the Fish and Aquatic Life Continuous Criteria and the Human Health Criteria. See Table 1 in Remedial Action Sampling and Analysis Plan.

** Chromium III = Total Chromium - Hexavalent Chromium. Calculation performed by the laboratory.

All units in microgram per liter (µg/L)

MDL: Medium Detection Limit

Q: Lab Qualifier

J: Indicates an estimated value between the MDL and the Practical Quantitation Limit (PQL) for the analyte.

Bolded values indicate results greater than MDL.

Highlighted values indicate results exceed the cleanup standard.

ND: Not Detected

NS: Not Sampled

Table 2
 Performance Data for PW-3 Operation
 North Penn Area 2 Superfund Site
 Hatfield Township, Pennsylvania
 Updated 22 December 2015

Date and Time	Totalizer Reading (gal)	Total Flow (gal)	Average Flow for Period (gpm)	Average Flow for Period (gpd)	Total VOC Conc in Well (ug/l)	Cumulative Pounds VOCs Removed	Efficiency - Pounds removed/ 100K gal	Removal Rate - Pounds/ year @ 20,000 gpd
PW-1 Operation								
01/01/01 12:00								
04/28/02 14:00		9,641,700	13.9	20,000	809	65	0.7	49
PW-3 Operation								
12/14/02 15:56	3,470,840	5,945,840	14.8	21,326	4,170	240	3.5	254
12/04/03 11:00	10,897,332	13,372,332	14.0	20,138	3,351	472	2.8	204
12/21/04 08:30	18,837,960	21,312,960	14.0	20,171	1,619	627	1.4	99
11/07/05 16:03	25,622,360	28,097,360	15.3	21,978	1,602	727	1.3	98
12/18/06 08:00	3,147,400	36,874,830	30.1	43,276	2,000	846	1.7	122
12/10/07 10:04	10,148,650	43,876,080	12.2	17,556	1,618	965	1.4	99
12/11/08 10:27	6,734,020	51,983,032	14.5	20,828	869	1,050	0.7	53
11/30/09 07:45	4,145,450	59,125,462	14.1	20,356	981	1,110	0.8	60
12/23/10 15:01	1,820,650	67,867,920	17.4	25,049	659	1,171	0.5	40
12/15/11 09:35	4,307,990	76,695,207	17.4	25,125	725	1,221	0.6	44
12/13/12 08:28	2,264,504	84,044,677	14.1	20,321	693	1,261	0.6	42
12/19/13 09:42	9,025,402	90,805,575	9.8	14,128	803	1,306	0.7	49
12/30/14 09:38	16,676,354	98,456,527	10.3	14,818	745	1,355	0.6	45
02/03/15 10:58	17,256,153	99,036,326	11.5	16,539	745	1,358	0.6	45
02/27/15 11:05	17,550,370	99,330,543	8.5	12,257	745	1,360	0.6	45
03/10/15 08:00	17,751,041	99,531,214	12.8	18,458	745	1,361	0.6	45
03/20/15 13:00	17,982,449	99,762,622	15.7	22,669	745	1,363	0.6	45
04/07/15 15:50	18,371,621	100,151,794	14.9	21,480	745	1,365	0.6	45
04/30/15 10:14	18,846,102	100,626,275	14.5	20,841	745	1,368	0.6	45
05/21/15 09:09	19,267,444	101,047,617	14.0	20,107	747	1,371	0.6	46
06/26/15 09:05	20,045,082	101,825,255	15.0	21,603	698	1,375	0.6	42
08/03/15 11:50	20,663,165	102,443,338	11.3	16,216	698	1,379	0.6	42
08/31/15 07:38	21,281,673	103,061,846	15.4	22,228	698	1,383	0.6	42
10/15/15 10:03	22,267,951	104,048,124	15.2	21,868	698	1,388	0.6	42
10/22/15 09:15	22,418,004	104,198,177	15.0	21,539	698	1,389	0.6	42
11/13/15 12:15	22,883,353	104,663,526	14.6	21,033	648	1,392	0.5	39
12/22/15 09:20	23,608,432	105,388,605	13.0	18,650	648	1,396	0.5	39

Key Dates

3/18/10 - Pump pulled and cleaned; new Totalizer/Flow Meter installed.
 3/18/10 cont. - End reading = 6,208,500 gal; new meter start at 0 gal.
 5/20/10 - Replaced liquid (non-motor) end of the pump (Goulds 18GS07).
 9/9/10 - Penn Color reported the pump stopped working in the morning.
 9/15/10 - Installed new pump (Goulds 18GS10422C, 1hp). Replaced pump control box with 15A breaker and enclosure (previous control box not rated for 1hp motor).
 10/19/10 - Flow meter problem observed.
 10/21/10 - New totalizer/flow meter installed. End reading = 4,858,758; New meter start at 0 gal.
 4/8/11 - Due to site transformer problem disrupting electric power supply to pump, pump did not operate for approx. 1 day.
 5/17/11 - PW-3 sampled during Remedial Design groundwater monitoring event. Value listed in table on 5/16/11 date.
 6/22/11 - New totalizer/flow meter installed. End reading = 6,339,947; New meter start at 0 gal.
 6/19/12 - New flow meter and automated system installed (RA implementation). End reading = 8,158,592 gal; New meter start at 0 gal.
 8/30/12 - Data indicate pump did not operate 7/18/12 17:35 through 7/23/12 08:50, or 7/26/12 19:20 through 7/27/12 11:05. Alerts programming issues still being investigated.
 8/30/12 - Flow meter total reset to 0 gal. End reading prior to reset = 1,234,364 gal.
 11/8/12 - The October reading was delayed due to Hurricane Sandy.
 10/7/13 - The pump was cleaned to try to increase the flow rate.
 12/29/13 - The pump stopped working.
 1/8/14 - Removed old pump and riser pipe. Riser pipe restricted due to buildup. Identified the need for 3-phase motor.
 1/10/14 - Installed new pump (Goulds 18GS10422C, 1hp, with 3-phase 230V motor CentriPro M10432 100C313) and new 1" 160 psi black poly riser pipe.
 12/26/14 - 12/30/14 - Pump shut down due to full bag filter on Penn E&R treatment system.
 2/27/15 - The pump had been shut down for a period of time due to full bag filter on Penn E&R treatment system.
 3/10/15 - Replaced pump motor (Goulds 18GS10, serial # A1549302) and riser pipe. Pump set at 100' bgs.

Total VOC Concentration Basis

Values in **bold** are actual sample results.
 Values for dates between samples are the average of the two samples.
 Values after the most recent sample date are roll-forward values and will be updated once the next sample result is obtained.

Notes: Results from 6/1/05 through 12/15/11 include Freon 113 (typically <10 ug/l) and TCFM (typically <20 ug/l) which were not previously included in total VOCs.
 For 2002 - 2014, spreadsheet rows compressed (hidden) to show only last data for the year in order to save space on table, but all data are preserved.

Table 3
Performance Data for MW-2 Operation
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania
Updated 22 December 2015

Date and Time	Pump Cycle Count	Total Flow (gal) - 0.07 gal/cycle	Average Flow for Period (gpm)	Average Flow for Period (gpd)	Total VOC Conc in Well (ug/l)	Cumulative Pounds VOCs Removed	Efficiency - Pounds removed/ 100K gal	Removal Rate - Pounds/ year @ 400 gpd
MW-2 Operation								
12/21/04 08:30	1,600,000	112000	0.403	581	19,528	17.5	16.3	24
11/07/05 16:03	3,412,970	238908	0.513	739	15,150	40.2	12.6	18
12/18/06 08:00	6,997,105	489797	0.069	99	14,205	68.8	11.9	17
12/10/07 10:14	6,997,131	489799	0.000	0	14,205	68.8	0.0	
12/11/08 10:24	9,324,448	552645	0.612	882	10,120	78.9	8.4	12
11/30/09 07:42	11,333,363	693269	0.241	347	16,266	91.4	13.6	20
11/17/10 09:16	12,952,765	806627	0.007	10	9,357	105.0	7.8	11
12/23/10 15:01	13,040,011	812734	0.107	154	9,531	105.5	8.0	12
12/15/11 09:35	14,454,676	911761	0.537	773	11,822	114.0	9.9	14
12/13/12 08:28	17,751,367	1142529	0.481	693	10,889	130.2	9.1	13
12/19/13 09:42	21,099,680	1376911	0.425	612	15,413	158.4	12.9	19
12/30/14 09:38	23,758,563	1563033	0.381	549	10,822	180.2	9.0	13
02/03/15 10:58	23,758,620	1563037	0.000	0	10,822	180.2	9.0	13
02/27/15 11:05	23,758,621	1563037	0.000	0	10,822	180.2	9.0	13
03/10/15 08:00	23,758,622	1563037	0.000	0	10,822	180.2	9.0	13
03/20/15 13:00	23,758,623	1563037	0.000	0	10,822	180.2	9.0	13
04/07/15 15:50	200	1563051	0.001	1	10,822	180.2	9.0	13
04/30/15 10:14	77,862	1568487	0.166	239	10,822	180.7	9.0	13
05/21/15 09:09	161,932	1574372	0.195	281	8,791	181.1	7.3	11
06/26/15 09:05	287,419	1583156	0.169	244	7,609	181.6	6.3	9
08/03/15 11:50	415,810	1592143	0.164	236	7,609	182.2	6.3	9
08/31/15 07:38	510,326	1598760	0.165	238	7,609	182.6	6.3	9
10/15/15 10:03	698,190	1611910	0.202	292	7,609	183.5	6.3	9
10/22/15 09:15	731,272	1614226	0.231	332	7,609	183.6	6.3	9
11/13/15 12:15	829,461	1621099	0.216	311	6,427	184.0	5.4	8
12/22/15 09:20	969,132	1630876	0.175	251	6,427	184.5	5.4	8

Key Dates

1/27/10 - Pump was shut down by Penn Color for previous 36 hours, due to rain flooding event.
3/18/10 - Pump pulled and cleaned; replaced pressure gage.
9/15/10 - Pump pulled and cleaned.
10/15/10 - Pump reading indicated pump no functioning.
10/21/10 - Pump inspected and determined to be unfixable.
11/8/10 - Replacement pump installed (QED AP2B Short).
5/17/11 - MW-2 sampled during Remedial Design groundwater monitoring event. Value listed in table on 5/16/11 date.
6/22/11 - Pump operating but reading not obtained; so used average of adjacent table values.
9/27/11 - Pump operating but reading not obtained; so used average of adjacent table values.
6/19/12 - Pump operating but reading not obtained; so used average of adjacent table values.
11/8/12 - The October reading was delayed due to Hurricane Sandy.
4/7/15 - Replaced cycle counter. It was discovered to have been malfunctioning since sometime in January, though the pump had been operating correctly.

Total VOC Concentration Basis

Values in **bold** are actual sample results.
Values for dates between samples are the average of the two samples.
Values after the most recent sample date are roll-forward values and will be updated once the next sample result is obtained.

Notes: Results from 6/1/05 on include Freon 113 (7 ug/l) and TCFM (19 ug/l) which were not previously included in total VOCs.
For 2002 - 2014 spreadsheet rows compressed (hidden) to show only last data for the year in order to save space on table, but all data are preserved.

Table 4
Performance Data for All Recovery Wells
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania
Updated 22 December 2015

Pumps Operated	Date and Time	Cumulative Pounds VOCs Removed	% of VOCs Removed	Estimated Pounds VOCs Remaining	Total Flow	Average Flow for Period (gpd)
PW-1	01/01/01 12:00			2,576		
	04/28/02 14:00	65	2.6%	2,511		20,000
PW-3	04/29/02 14:00			2,511		
	12/14/02 15:56	240	9.6%	2,271		21,326
	12/04/03 11:00	472	18.8%	2,039		20,138
PW-3 & MW-2	08/16/04 12:10	593	23.6%	1,918		22,605
	12/21/04 08:30	644	25.7%	1,867		20,751
	11/07/05 16:03	767	30.5%	1,744		22,717
	12/18/06 08:00	915	36.4%	1,596	37,364,627	43,375
	12/10/07 10:04	1,034	41.2%	1,477	44,365,879	17,556
	12/11/08 10:27	1,129	45.0%	1,382	52,535,677	21,710
	11/30/09 07:45	1,201	47.8%	1,310	59,818,731	20,703
	12/23/10 15:01	1,277	50.9%	1,234	68,680,654	23,429
	12/15/11 09:35	1,335	53.2%	1,176	77,606,968	25,898
	12/13/12 08:28	1,392	55.4%	1,119	85,187,206	21,014
	12/19/13 09:42	1,464	58.3%	1,047	92,182,486	14,739
	12/30/14 09:38	1,535	61.1%	976	100,019,560	15,367
	02/03/15 10:58	1,539	61.3%	972	100,599,363	16,540
	02/27/15 11:05	1,540	61.3%	971	100,893,580	12,257
	03/10/15 08:00	1,542	61.4%	969	101,094,251	18,458
	03/20/15 13:00	1,543	61.5%	968	101,325,659	22,669
	04/07/15 15:50	1,545	61.5%	965	101,714,845	21,481
	04/30/15 10:14	1,549	61.7%	962	102,194,762	21,080
	05/21/15 09:09	1,552	61.8%	959	102,621,989	20,388
	06/26/15 09:05	1,557	62.0%	954	103,408,411	21,847
08/03/15 11:50	1,561	62.2%	950	104,035,481	16,452	
08/31/15 07:38	1,565	62.3%	946	104,660,606	22,466	
10/15/15 10:03	1,572	62.6%	939	105,660,034	22,160	
10/22/15 09:15	1,573	62.6%	938	105,812,403	21,871	
11/13/15 12:15	1,576	62.8%	935	106,284,625	21,343	
12/22/15 09:20	1,580	62.9%	931	107,019,481	18,901	
Average (~last 6 months)						20,172

Notes: For 2002 - 2014 spreadsheet rows compressed to show only last data for the year in order to save space on table, but all data are preserved.

8/30/12 - PW-3 flow meter reading/programming issue.

Table 5
Water Level Data
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania
Updated 13 November 2015

Date	Well	Top of Casing Elevation (ft amsl)	Depth to Water (ft below top of inner casing)	Water Level Elevation (ft amsl)	Notes
5/18/2015	MW-1	354.34	16.94	337.40	
5/18/2015	MW-1I	354.3	15.38	338.92	
5/18/2015	MW-1D	354.22	20.26	333.96	
5/18/2015	MW-2	355.33	--	--	Not collected
5/18/2015	MW-2I	353.13	22.61	330.52	
5/18/2015	MW-2D	353.38	23.88	329.50	
5/18/2015	MW-3A	348.72	16.60	332.12	
5/18/2015	MW-3B	353.18	20.30	332.88	
5/18/2015	MW-3C	348.59	15.76	332.83	
5/18/2015	MW-3D	348.88	16.00	332.88	
5/18/2015	MW-4S	354.5	13.53	340.97	
5/18/2015	MW-4D	353.51	12.57	340.94	
5/18/2015	MW-5	346.68	13.05	333.63	
5/18/2015	MW-5I	348.84	14.78	334.06	
5/18/2015	MW-5D	349.12	15.59	333.53	
5/18/2015	MW-5XD	348.73	15.07	333.66	
5/18/2015	MW-6	347.23	12.74	334.49	
5/18/2015	MW-7	350.28	11.55	338.73	
5/18/2015	MW-8S	362.72	9.37	353.35	
5/18/2015	MW-8D	363.08	9.19	353.89	
5/18/2015	MW-9S	347.64	6.21	341.43	
5/18/2015	MW-9I	348.63	7.22	341.41	
5/18/2015	MW-9D	347.99	6.58	341.41	
5/18/2015	MW-10S	354.29	16.25	338.04	
5/18/2015	MW-10I	355.13	16.49	338.64	
5/18/2015	MW-10D	354.66	17.99	336.67	
5/18/2015	MW-11A	344.14	5.24	338.90	
5/18/2015	MW-11B	344.2	5.39	338.81	
5/18/2015	MW-11C	343.89	5.93	337.96	
5/18/2015	MW-12A	355.31	12.06	343.25	
5/18/2015	MW-12B	354.91	10.32	344.59	
5/18/2015	MW-13S	341.78	8.36	333.42	
5/18/2015	MW-13I	340.89	7.26	333.63	
5/18/2015	MW-13D	342.2	7.54	334.66	
5/18/2015	MW-14S	351.91	10.51	341.40	
5/18/2015	MW-14I	351.79	10.53	341.26	
5/18/2015	MW-14D	351.51	10.21	341.30	
5/18/2015	PCGW-2	355.91	20.04	335.87	
5/18/2015	PCGW-3	353.97	--	--	Well not accessible
5/18/2015	PW-3	353.47	--	--	Not collected
5/18/2015	SMP-0	342.29	-1.11	341.18	Reading relative to stream monitoring point
5/18/2015	SMP-1A	338.47	-0.13	338.34	Reading relative to stream monitoring point
5/18/2015	SMP-1B	338.21	-0.03	338.17	Reading relative to stream monitoring point
5/18/2015	SMP-2A	334.53	-0.01	334.52	Reading relative to stream monitoring point
5/18/2015	SMP-2B	334.56	-0.03	334.53	Reading relative to stream monitoring point
5/18/2015	SMP-3	335.12	-1.96	333.15	Reading relative to stream monitoring point

Table 5
Water Level Data
North Penn Area 2 Superfund Site
Hatfield Township, Pennsylvania
Updated 13 November 2015

Date	Well	Top of Casing Elevation (ft amsl)	Depth to Water (ft below top of inner casing)	Water Level Elevation (ft amsl)	Notes
11/13/2015	MW-1	354.34	16.50	337.84	
11/13/2015	MW-1I	354.3	16.18	338.12	
11/13/2015	MW-1D	354.22	19.11	335.11	
11/13/2015	MW-2	355.33	31.23	324.10	
11/13/2015	MW-2I	353.13	20.89	332.24	
11/13/2015	MW-2D	353.38	21.61	331.77	
11/13/2015	MW-3A	348.72	16.95	331.77	
11/13/2015	MW-3B	353.18	21.49	331.69	
11/13/2015	MW-3C	348.59	17.71	330.88	
11/13/2015	MW-3D	348.88	14.69	334.19	
11/13/2015	MW-4S	354.5	14.29	340.21	
11/13/2015	MW-4D	353.51	13.33	340.18	
11/13/2015	MW-5	346.68	12.25	334.43	
11/13/2015	MW-5I	348.84	14.14	334.70	
11/13/2015	MW-5D	349.12	14.59	334.53	
11/13/2015	MW-5XD	348.73	14.39	334.34	
11/13/2015	MW-6	347.23	12.21	335.02	
11/13/2015	MW-7	350.28	12.53	337.75	
11/13/2015	MW-8S	362.72	9.15	353.57	
11/13/2015	MW-8D	363.08	9.19	353.89	
11/13/2015	MW-9S	347.64	6.57	341.07	
11/13/2015	MW-9I	348.63	7.91	340.72	
11/13/2015	MW-9D	347.99	6.90	341.09	
11/13/2015	MW-10S	354.29	15.87	338.42	
11/13/2015	MW-10I	355.13	15.31	339.82	
11/13/2015	MW-10D	354.66	17.35	337.31	
11/13/2015	MW-11A	344.14	5.38	338.76	
11/13/2015	MW-11B	344.2	5.49	338.71	
11/13/2015	MW-11C	343.89	5.82	338.07	
11/13/2015	MW-12A	355.31	12.36	342.95	
11/13/2015	MW-12B	354.91	10.85	344.06	
11/13/2015	MW-13S	341.78	8.07	333.71	
11/13/2015	MW-13I	340.89	6.95	333.94	
11/13/2015	MW-13D	342.2	7.27	334.93	
11/13/2015	MW-14S	351.91	10.83	341.08	
11/13/2015	MW-14I	351.79	11.22	340.57	
11/13/2015	MW-14D	351.51	11.53	339.98	
11/13/2015	PCGW-2	355.91	19.22	336.69	
11/13/2015	PCGW-3	353.97	--	--	Well not accessible
11/13/2015	PW-3	353.47	23.84	329.63	
11/13/2015	SMP-0	342.29	-0.81	341.48	Reading relative to stream monitoring point
11/13/2015	SMP-1A	338.47	-0.09	338.37	Reading relative to stream monitoring point
11/13/2015	SMP-1B	338.21	0.21	338.41	Reading relative to stream monitoring point
11/13/2015	SMP-2A	334.53	0.07	334.61	Reading relative to stream monitoring point
11/13/2015	SMP-2B	334.56	Not found	--	Reading relative to stream monitoring point
11/13/2015	SMP-3	335.12	-0.86	334.25	Reading relative to stream monitoring point

Figure A
North Penn Area 2 Superfund Site

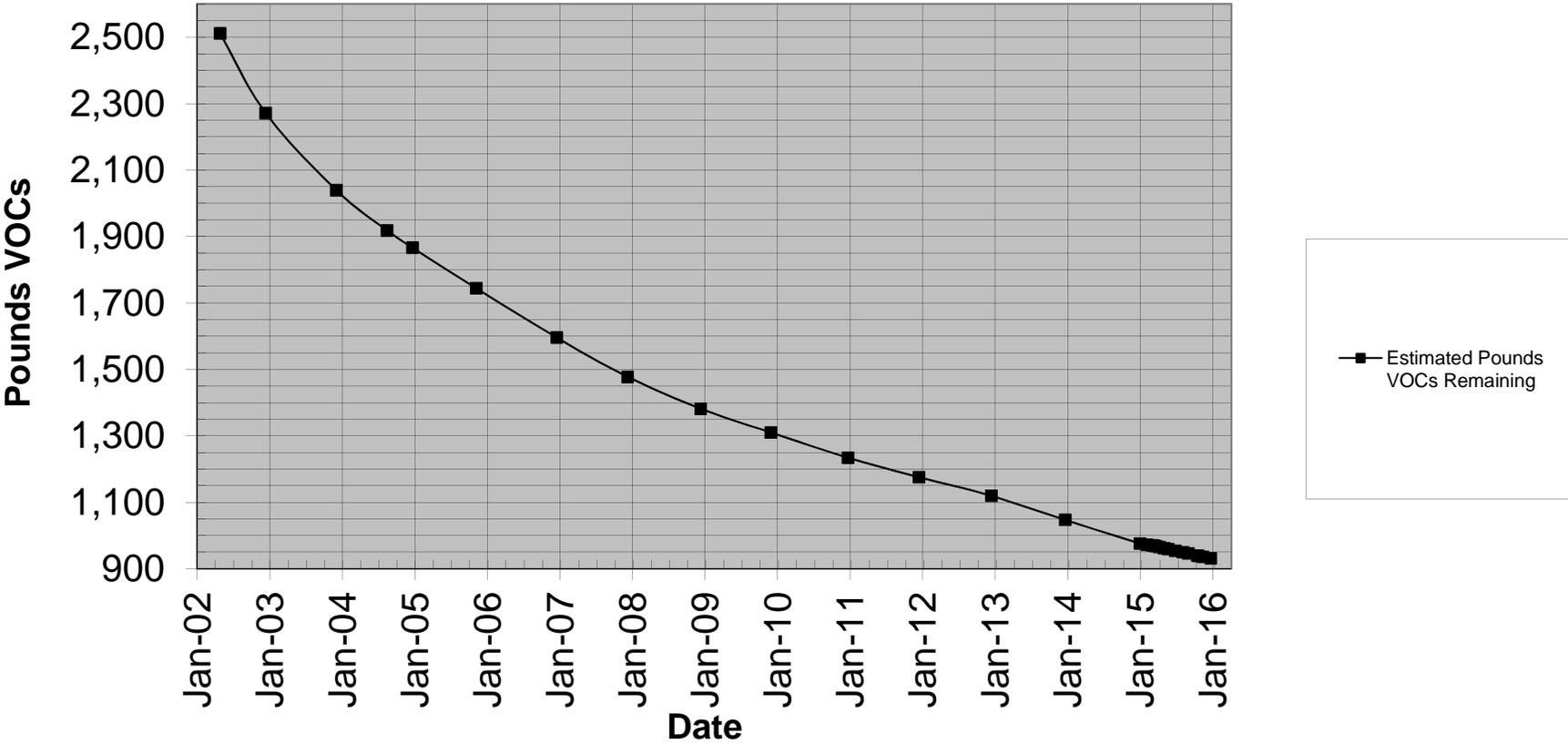
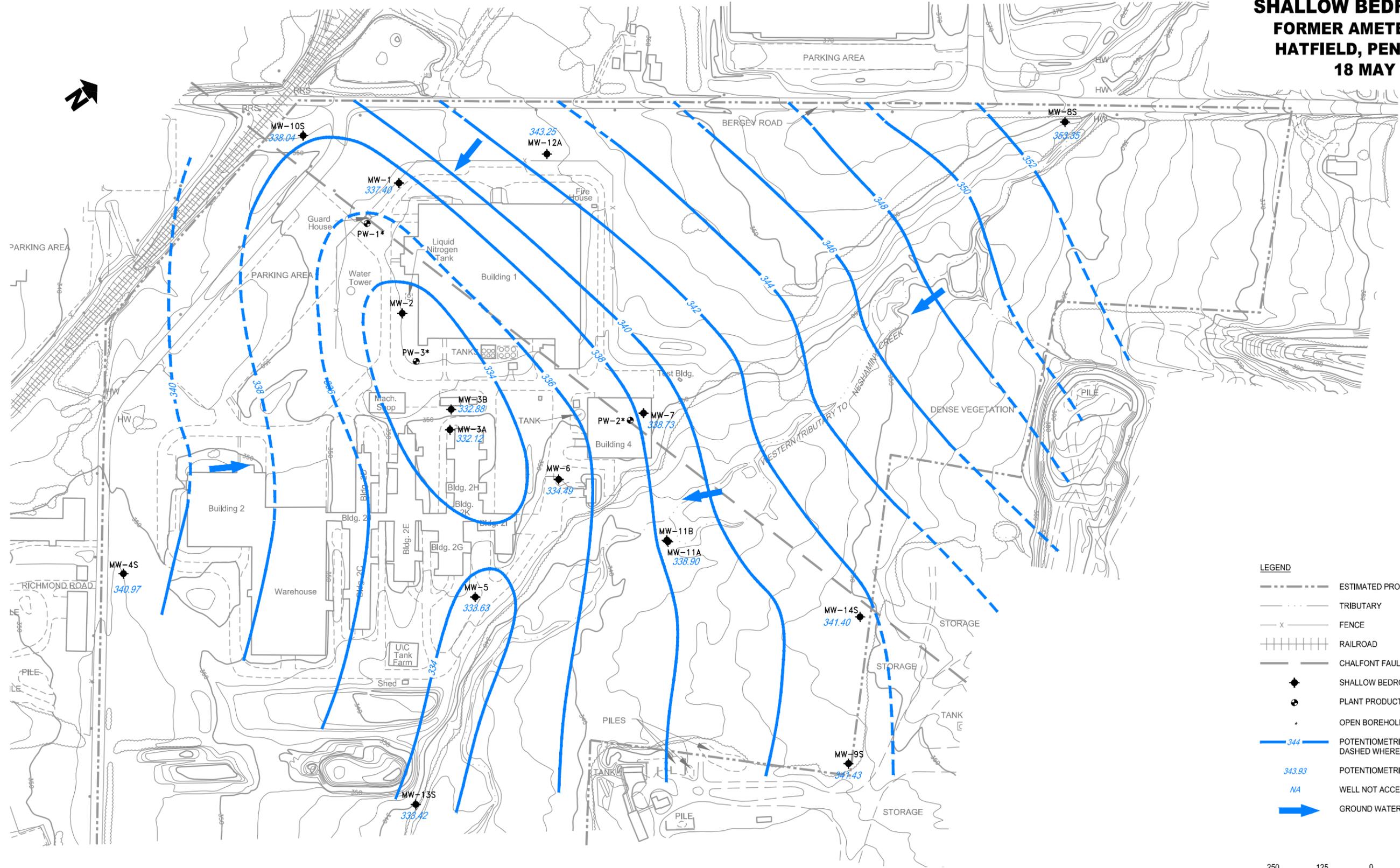


FIGURE 1
POTENTIOMETRIC SURFACE MAP
SHALLOW BEDROCK WELLS
FORMER AMETEK FACILITY
HATFIELD, PENNSYLVANIA
18 MAY 2015



LEGEND

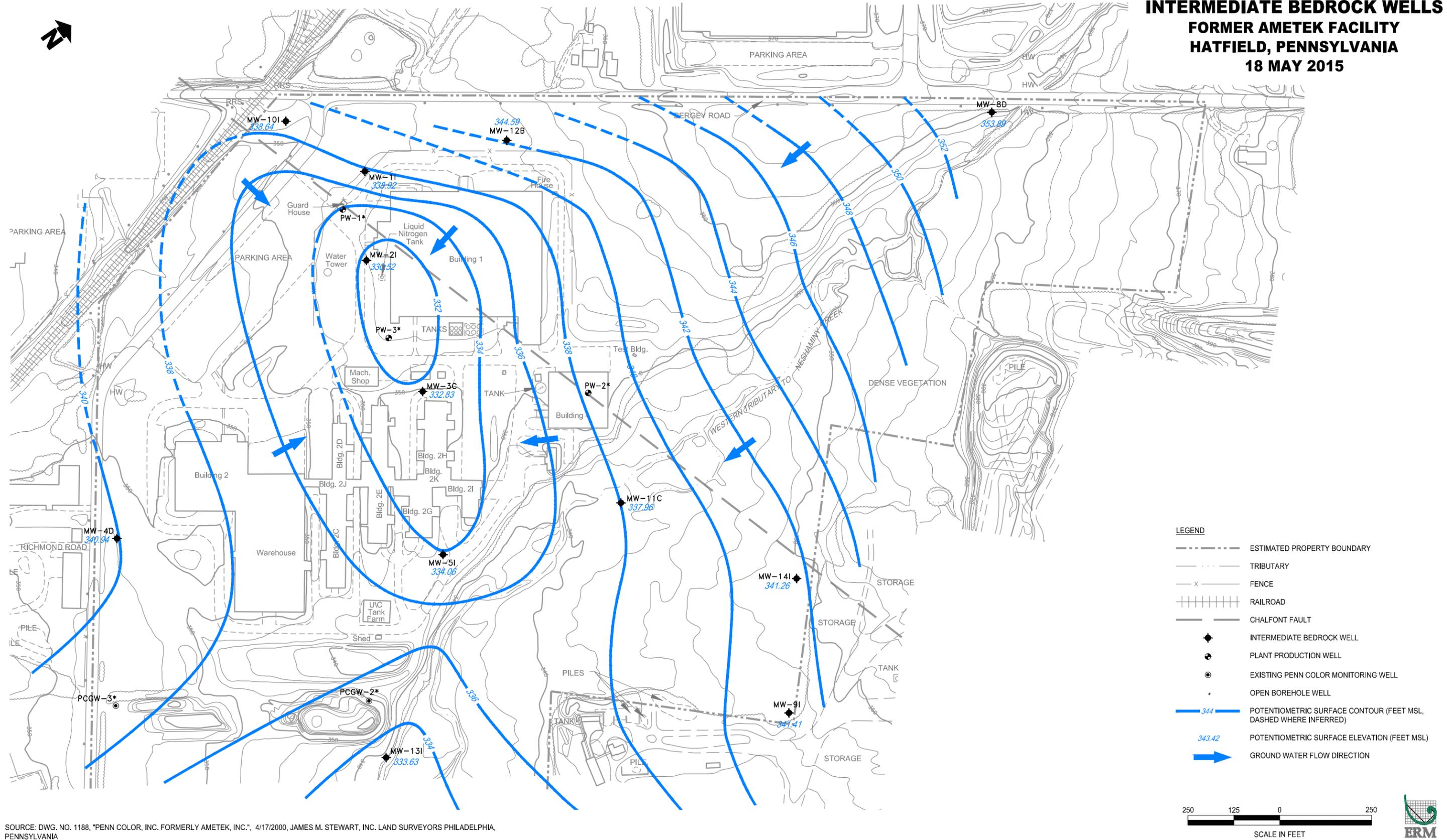
- ESTIMATED PROPERTY BOUNDARY
- - - - - TRIBUTARY
- x - FENCE
- ||||| RAILROAD
- CHALFONT FAULT
- ◆ SHALLOW BEDROCK WELL
- PLANT PRODUCTION WELL
- OPEN BOREHOLE WELL
- 344 — POTENTIOMETRIC SURFACE CONTOUR (FEET MSL, DASHED WHERE INFERRED)
- 343.93 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- NA WELL NOT ACCESSIBLE FOR MEASUREMENT
- ➔ GROUND WATER FLOW DIRECTION



SOURCE: DWG. NO. 1188, "PENN COLOR, INC. FORMERLY AMETEK, INC.", 4/17/2000, JAMES M. STEWART, INC. LAND SURVEYORS PHILADELPHIA, PENNSYLVANIA

G:\CAD\Drawings\AMETEK\0042525\A214.dwg

FIGURE 2
POTENTIOMETRIC SURFACE MAP
INTERMEDIATE BEDROCK WELLS
FORMER AMETEK FACILITY
HATFIELD, PENNSYLVANIA
18 MAY 2015



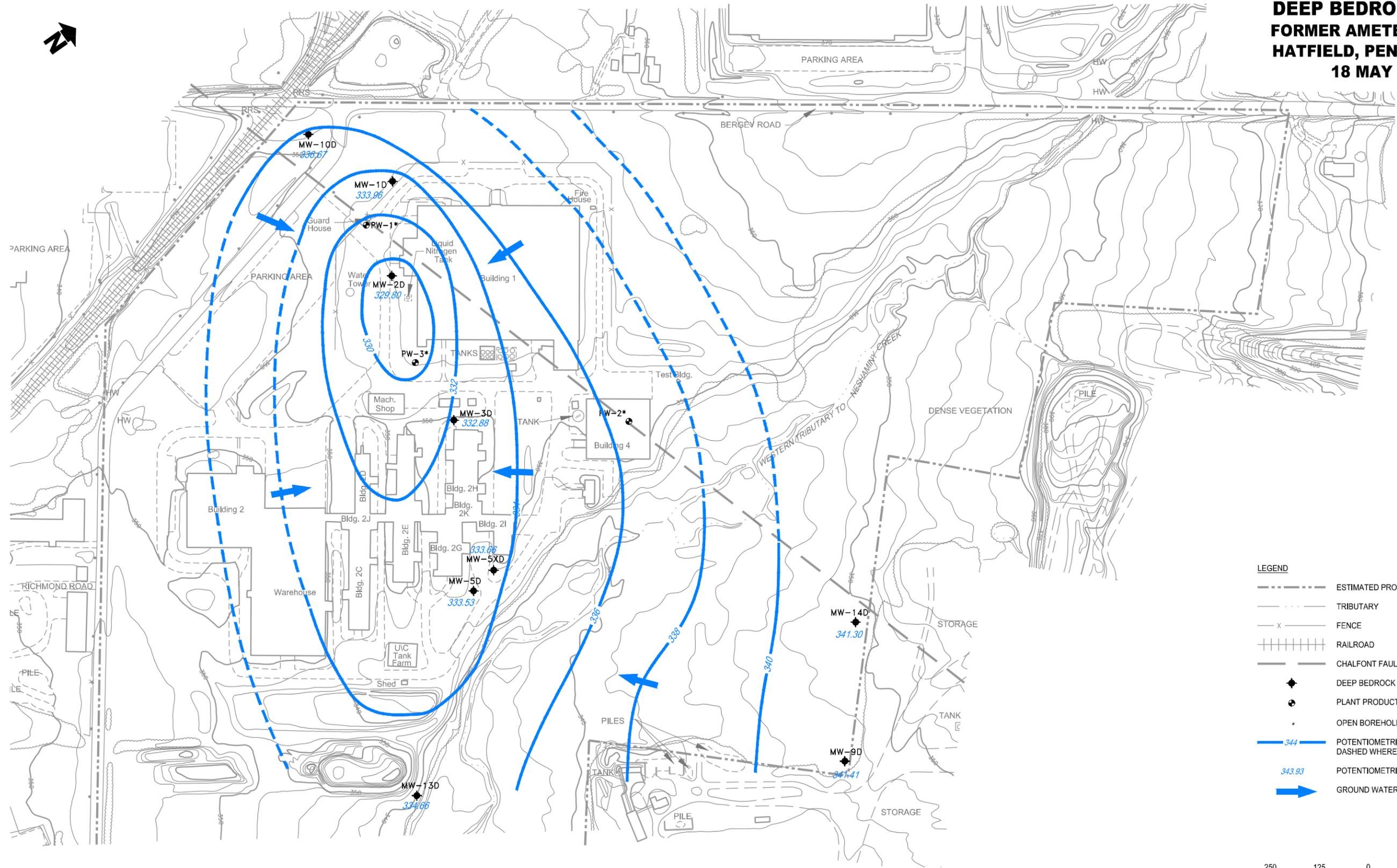
- LEGEND**
- ESTIMATED PROPERTY BOUNDARY
 - - - - - TRIBUTARY
 - x - FENCE
 - ++++ RAILROAD
 - CHALFONT FAULT
 - ◆ INTERMEDIATE BEDROCK WELL
 - PLANT PRODUCTION WELL
 - EXISTING PENN COLOR MONITORING WELL
 - OPEN BOREHOLE WELL
 - 344 — POTENTIOMETRIC SURFACE CONTOUR (FEET MSL, DASHED WHERE INFERRED)
 - 343.42 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
 - ➔ GROUND WATER FLOW DIRECTION



SOURCE: DWG. NO. 1188, "PENN COLOR, INC. FORMERLY AMETEK, INC.", 4/17/2000, JAMES M. STEWART, INC. LAND SURVEYORS PHILADELPHIA, PENNSYLVANIA

C:\CAD\Drawings\AMETEK\0042525\A215.dwg

FIGURE 3
POTENTIOMETRIC SURFACE MAP
DEEP BEDROCK WELLS
FORMER AMETEK FACILITY
HATFIELD, PENNSYLVANIA
18 MAY 2015



LEGEND

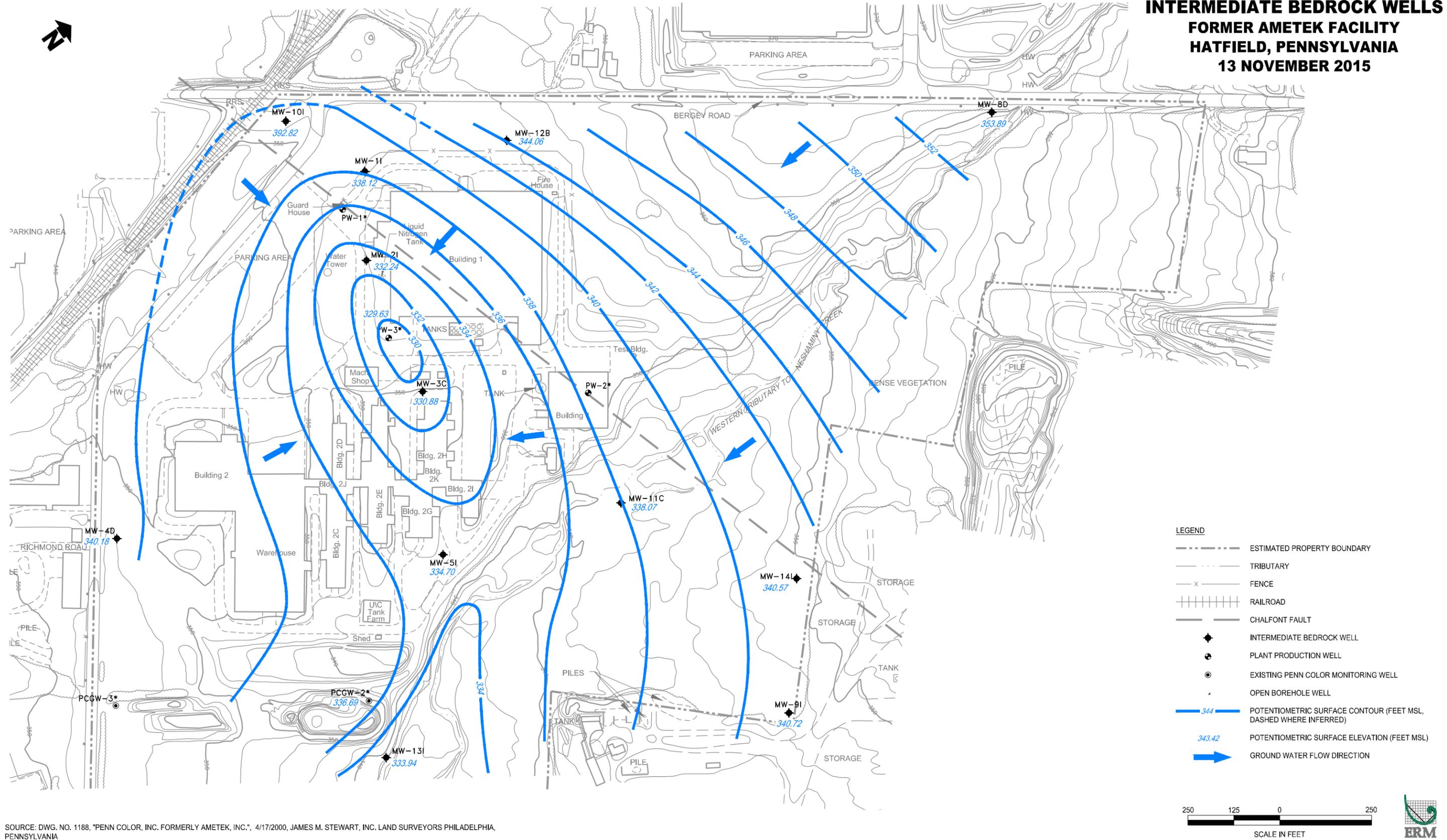
	ESTIMATED PROPERTY BOUNDARY
	TRIBUTARY
	FENCE
	RAILROAD
	CHALFONT FAULT
	DEEP BEDROCK WELL
	PLANT PRODUCTION WELL
	OPEN BOREHOLE WELL
	POTENTIOMETRIC SURFACE CONTOUR (FEET MSL, DASHED WHERE INFERRED)
	POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
	GROUND WATER FLOW DIRECTION



SOURCE: DWG. NO. 1188, "PENN COLOR, INC. FORMERLY AMETEK, INC.", 4/17/2000, JAMES M. STEWART, INC. LAND SURVEYORS PHILADELPHIA, PENNSYLVANIA

G:\CAD\Drawings\AMETEK\0042525\A216.dwg

FIGURE 5
POTENTIOMETRIC SURFACE MAP
INTERMEDIATE BEDROCK WELLS
FORMER AMETEK FACILITY
HATFIELD, PENNSYLVANIA
13 NOVEMBER 2015

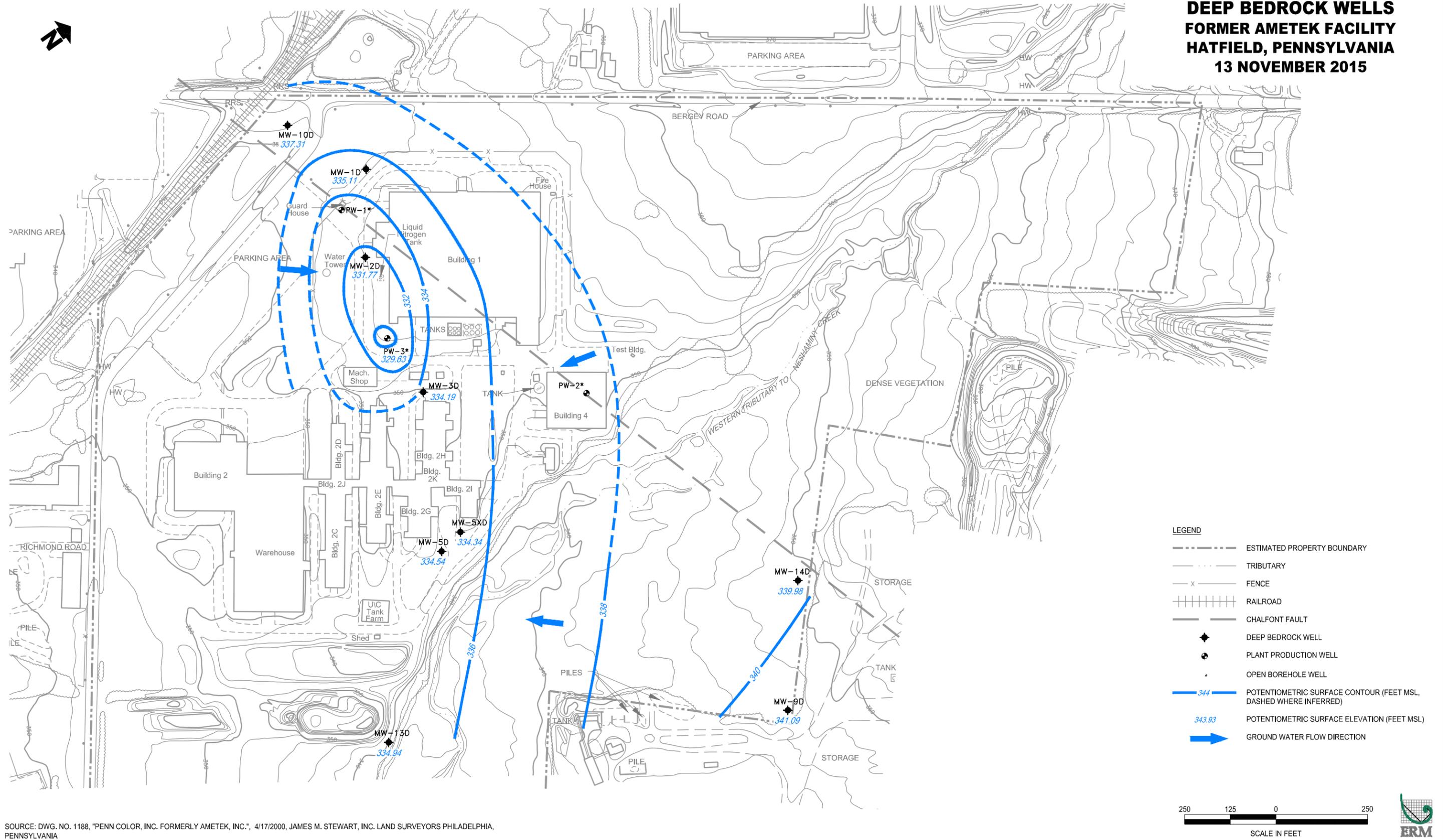


SOURCE: DWG. NO. 1188, "PENN COLOR, INC. FORMERLY AMETEK, INC.", 4/17/2000, JAMES M. STEWART, INC. LAND SURVEYORS PHILADELPHIA, PENNSYLVANIA

C:\CAD\Drawings\AMETEK\0042525\A218.dwg



FIGURE 6
POTENTIOMETRIC SURFACE MAP
DEEP BEDROCK WELLS
FORMER AMETEK FACILITY
HATFIELD, PENNSYLVANIA
13 NOVEMBER 2015



SOURCE: DWG. NO. 1188, "PENN COLOR, INC. FORMERLY AMETEK, INC.", 4/17/2000, JAMES M. STEWART, INC. LAND SURVEYORS PHILADELPHIA, PENNSYLVANIA

G:\CAD\Drawings\AMETEK\0042525\A219.dwg

